EPA–PERMITTED DEEP WELL DISPOSAL FACILITY INVESTMENT OPPORTUNITY

ENVIRONMENTAL DISPOSAL SYSTEMS, INC.

A PRESENTATION
FOR THE

POLICEMEN AND FIREMEN RETIREMENT SYSTEM

908 CITY–COUNTY BUILDING

DETROIT, MICHIGAN 48226

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SUMMARY PRESENTATION BOOKLET

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I. DESCRIPTION OF THE INVESTMENT OPPORTUNITY

EPA COMMERCIAL CLASS I HAZARDOUS DEEP DISPOSAL WELL

Environmental Disposal Systems, Inc. ("EDS") has, after two and a half years of effort and considerable expense, received authorization from the United States Environmental Protection Agency ("EPA"), the Michigan Department of Natural Resources ("DNR"), and the Federal Aviation Administration ("FAA") to construct and operate the first EPA-permitted Commercial Class I Hazardous Deep Disposal Well on a 16.5 acre site in Romulus, Michigan. These authorizations were obtained after notices of EDS' applications for the permits were provided by the EPA and DNR to the Romulus City Council and were published in "The Detroit News" newspaper. In addition, public hearings were scheduled by both EPA and DNR but were later canceled because of the lack of comments and or complaints from local residents.

OPPORTUNITY

Currently, owners of EPA Commercial Class I Hazardous Deep Disposal Wells have a virtual monopoly on liquid waste disposal because of their operating efficiencies. Disposal by way of deep well injection is the least expensive method available. At this time, there are none operating in Michigan, only one operating elsewhere in the Mid-west (Vickery, Ohio), and a total of eleven altogether operating in the United States. All of these commercial facilities, other than the one in Vickery, Ohio, are based in Texas and Louisiana.

Approximately 9 billion gallons of liquid hazardous waste are generated each year in the United States and about 50 percent of this amount is safely disposed of in secure subsurface geological formations using Class I Hazardous Injection Wells. The EPA has supported Class I Deep Wells as the preferred method of disposing of liquid hazardous waste because, in the opinion of the EPA, it is safer than virtually all other waste disposal practices.

II. MANAGEMENT – ENVIRONMENTAL DISPOSAL SYSTEMS, INC.

MANAGEMENT OF EDS AND PERSONNEL ASSOCIATED WITH THE FACILITY HAVE CONSIDERABLE EXPERIENCE IN:

- The construction, permitting, and operating of the only EPA Commercial Class II Deep–Well Disposal Facility in Eastern–lower Michigan (EDS' customers include MichCon, Consumers Power Company and American Natural Resources).

- The permitting, construction, and operation of a hazardous deep–well disposal facility.

- The overall handling of hazardous and non–hazardous industrial liquid waste streams.

- The drilling, completing, and operating of deep–wells in Michigan, Oklahoma, Texas, Kansas and Colorado for the production of hydrocarbons.

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III. DESCRIPTION OF THE EPA–PERMITTED COMMERCIAL CLASS I LIQUID HAZARDOUS WASTE DEEP–WELL DISPOSAL FACILITY

LOCATION

The Deep–Well facility will be built in Romulus, Michigan. This particular site was chosen because of its geological suitability, as determined by the Department of Geological Sciences of the University of Michigan, which was employed by EDS for this specific purpose.

(According to U of M:)

> *"The porosity and thickness of the proposed injection zone are appropriate for the injection of liquid waste, and there are sufficient confining zones to prevent vertical migration of fluids. The proposed site is in a tectonically stable region and there is no evidence to suggest faulting, which could compromise the integrity of the proposed injection zone."*

Additional criteria used in selecting the Romulus site are "light industrial" zoning, rural setting, access to Interstate Highways 275 and 94, and a CSX Transportation rail–line.

The disposal well(s) will be drilled to a depth of 4500' and the injection zone will be the Mt. Simon sandstone formation. This same formation is used by the other Private Class I Hazardous wells, such as BASF Wyandotte and Parke Davis Company's in Holland, Upjohn Company in Kalamazoo, Gelman Science in Ann Arbor and Detroit Coke Corporation in Detroit. The Mt. Simon formation is also the injection zone used at the commercial deep–well facility in Vickery, Ohio, as well as other private deep–wells throughout Ohio.

FACILITIES

EDS intends to construct two deep injection wells, a deep monitoring well, a laboratory, offices, an Act 64 hazardous waste storage facility, and to install utilities, roads, a rail line spur and other site improvements. The entire facility will be constructed and operated strictly according to EPA and DNR requirements, specifications and regulations.

IV. FACILITY POTENTIAL AND MARKET DEMAND

POTENTIAL

Dupont Environmental Remediation Services, Inc. ("Dupont") and Research and Engineering Consultants, Inc. ("REC") have prepared engineering evaluations of the injection capacity of the planned well(s). According to Dupont and REC, the well(s) are expected to have an injection capacity of 200,000 to 400,000 gallons per day and a useful economic life of 15 to 30 years.

MARKET DEMAND

Based on market studies prepared by Wayne State University and S and S Environmental, Inc., of Detroit, and the inherently low operating costs attributable to deep–well disposal, EDS anticipates immediate market penetration and a steadily increasing market share for disposal of large volumes of hazardous and non–hazardous waste liquids generated in Michigan, the Central and Eastern United States, and the Provinces of Ontario and Quebec, Canada.

Wayne State University and S and S Environmental, Inc., have concluded that after a reasonable start–up period, EDS should be able to dispose of 2,000,000 gallons per month and eventually as high as 8,000,000 gallons of waste per month, or up to 96,000,000 gallons of waste per year. Prices could range from $0.15 to $4.00 per gallon with a mean of $0.50 to $.78 per gallon.

V. HAROLD MARCUS LTD., INVESTOR/PARTNER AND CUSTOMER

EDS has received and accepted a Proposal from Harold Marcus Limited, a Canadian national hazardous waste transportation company based in Bothwell, Ontario, to participate as a 20 percent equity owner in the Facility and to contribute $1,220,000 of the $6,100,000 required for construction of the Facility.

Marcus has been in business since 1946 and has a fleet of vehicles including 70 company–owned tractors, 90 tank trailers and 10 vacuum transports. The fleet hauls petroleum, acids, chemicals, solvents, and liquid hazardous waste, and has hazardous waste transportation authority in 32 states and all Canadian Provinces.

In addition, Marcus has agreed to provide marketing, transportation, and billing and collection services on behalf of the Facility. These services will be provided in an effort to maximize both the volume of liquid waste transported from as well as the per–gallon disposal fees charged back to generator/customers in Ontario and Quebec.

Marcus currently transports in excess of 5,000,000 gallons of liquid waste annually to various disposal facilities. Of this amount, approximately 80 percent is transported to disposal facilities in Michigan and Ohio.

Marcus anticipates that it can deliver 5,000,000 gallons of liquid waste to the Facility in the first year of operations and 10,000,000 to 15,000,000 gallons per year in each year thereafter. These volumes, alone, should allow the Facility to break–even the first year of operations, pay out to Investors, and pay back all loans within 5 to 6 years of operations.

LIST OF EXHIBITS

Management

1. Management
2. Environmental Health and Safety Advisory Board
3. Technical Advisory Group

Permits

4. EPA Permit Number MI–163–1W–0006 with letter of analysis from a former EPA Permit Writer, dated December 29, 1992
5. DNR Permit Number 376–914–882
6. FAA Construction Permit

Environmental Safety Reports

7. Environmental Safety Report from Michigan DNR to City of Romulus, dated October 26, 1990
8. Environmental Safety Report from Texas Water Commission, dated December 10, 1991
9. "Analysis of the Effects of EPA Restrictions on the Deep Injection of Hazardous Waste", EPA Publication 570/9–91–031, dated October, 1991
10. "Federal Regulatory Status of Class I Injection Wells", by Robert F. Van Voorhees, Attorney, Bryan Cave Law Firm, Washington, D.C.
11. Environmental Safety Report from Carl Curry, Detroit Coke Corporation, dated September 3, 1992

Geological, Engineering and Environmental Reports

12. Site Specific Geological Report from The University of Michigan, Department of Geological Sciences dated November 20, 1990
13. Site Specific Injection Capacity Engineering Report from Dupont Environmental Remediation Services, Inc. dated February, 1992
14. Site Specific Injection Capacity Engineering Report from Research and Engineering Consultants, Inc. dated September 15, 1992
15. Site Map, Level I Environmental Assessment
16. Engineering Bid Proposal from DuPont Environmental Remediation Services, Inc. dated March 2, 1992
17. Report from Richard Lyle, Research and Engineering Consultants, Inc., dated September 24, 1992 with Engineering Bid Proposal dated September 15, 1992
18. Railroad Spur Construction Proposal from CSX Transportation, dated December 18, 1990
19. Diagrams of a constructed Class I Disposal Well

Market Studies and Letters from Prospective Customers

20. Market Study from Wayne State University, dated March 16, 1992
21. Market Study from S and S Environmental, Inc., dated April 21, 1992
22. Analysis of Disposal Volumes at Vickery, Ohio Commercial Class I Site, Report from Carl Curry, Detroit Coke Corporation, dated August 6, 1992
23. National List of Class I Deep Wells, Report from Robert Smith, EPA, dated March 11, 1992 with Map showing Commercial Deep Well Facility locations.
24. Letters of Interest from Prospective Customers

Proposal from Investor/Partner/Customer

25. Proposal for Equity Participation and Disposal Volume Contributions from Harold Marcus Limited with Cash Flow Analysis

Use of Loan Proceeds

26. Use of Loan Proceeds – Injection Well #1, Drilling Contract, Facility Construction/Start–Up Cost Projections

Loan Documents

27. Legal Opinion regarding Investor/Lender Limited Liability
28. Loan Document
29. Romulus Deep Disposal Limited Partnership Agreement

SUMMARY

1. EDS has the only EPA Commercial Class I Hazardous Deep Disposal Well permit in Michigan. Michigan, the Midwest part of the United States, and Canada, are all in great need of a disposal facility of this nature.

2. EDS has the experience and all the necessary management experts in place to construct and operate the Facility.

3. The business that our partner, Harold Marcus Ltd., expects to be able to deliver to the Facility, alone, should enable the project to break–even in the first year of operation.

4. The market demand for this facility could exceed 100,000,000 gallons per year according to some experts. To date, EDS has received several encouraging letters of interest from prospective customers in Michigan, including: Ford, Chrysler, Selfridge Air Force Base, the City of Warren, Braun Engineering, a subsidiary of Masco Industries, along with Waxman Environmental Group of Ontario, Chemcycle, Inc., Sanexen Environmental Services, Inc., and Spec 2001, Inc. of Quebec, Canada.

5. Profits and ongoing cash–flow to the Pension Board could be excellent. Annual internal rates–of–return could be 25 percent per year or higher.

EDS DEEP DISPOSAL WELL

FORECASTED ANNUAL PRE-TAX NET CASH FLOW

SCENARIO #1 (WORST CASE)

	1994	1995	1996	1997
Forecasted Annual Gross Revenues for the Facility:				
Annual Volume (in Gallons)	5,000,000	10,000,000	15,000,000	15,000,000
Average charge per Gallon	$0.33	$0.33	$0.33	$0.33
Total Revenues	**1,650,000**	**3,300,000**	**4,950,000**	**4,950,000**
Forecasted Annual Royalty Payments for the Facility:				
City Management Corporation	99,000	198,000	297,000	297,000
City of Romulus	82,500	165,000	247,500	247,500
Engineering Firm	16,500	33,000	49,500	49,500
Total Royalty Payments	**198,000**	**396,000**	**594,000**	**594,000**
Forecasted Annual Operating Costs for the Facility:				
Salaries and Wages	425,000	670,000	670,000	670,000
Employee Benefit Costs	106,250	168,000	168,000	168,000
Liability Insurance	200,000	200,000	200,000	200,000
Supervision Charge to Operator	120,000	126,000	132,000	139,000
Down-Hole Maintenance	20,000	30,000	50,000	50,000
Site Maintenance and Supplies	50,000	100,000	150,000	150,000
Prevention Maintenance	20,000	50,000	100,000	100,000
Other Direct Costs	90,000	100,000	200,000	200,000
Utilities	20,000	40,000	60,000	60,000
Office and Overhead	80,000	100,000	120,000	120,000
Real & Personal Property Taxes	140,000	140,000	140,000	140,000
Michigan Single Business Tax	19,388	38,775	58,163	58,163
Licenses & Fees	10,000	15,000	20,000	20,000
Legal and Accounting	50,000	50,000	75,000	75,000
Contingencies	100,000	100,000	200,000	200,000
Total Operating Costs	**1,450,638**	**1,927,775**	**2,343,163**	**2,350,163**
Forecasted Annual Net Cash Flow before Income Taxes for the Facility	1,362	976,225	2,012,837	2,005,837

EDS DEEP DISPOSAL WELL

FORECASTED ANNUAL PRE–TAX NET CASH FLOW

SCENARIO #2 (MOST LIKELY)

	1994	1995	1996	1997
Forecasted Annual Gross Revenues for the Facility:				
Annual Volume (in Gallons)	10,000,000	20,000,000	30,000,000	40,000,000
Average charge per Gallon	$0.50	$0.50	$0.50	$0.50
Total Revenues	5,000,000	10,000,000	15,000,000	20,000,000
Forecasted Annual Royalty Payments for the Facility:				
City Management Corporation	300,000	600,000	900,000	1,200,000
City of Romulus	250,000	500,000	550,000	600,000
Engineering Firm	50,000	100,000	150,000	200,000
Total Royalty Payments	600,000	1,200,000	1,600,000	2,000,000
Forecasted Annual Operating Costs for the Facility:				
Salaries and Wages	425,000	670,000	670,000	670,000
Employee Benefit Costs	106,250	168,000	168,000	168,000
Liability Insurance	200,000	200,000	300,000	400,000
Supervision Charge to Operator	120,000	126,000	132,000	139,000
Down–Hole Maintenance	20,000	50,000	75,000	100,000
Site Maintenance and Supplies	50,000	150,000	200,000	300,000
Prevention Maintenance	20,000	60,000	75,000	100,000
Other Direct Costs	90,000	150,000	175,000	200,000
Utilities	20,000	40,000	60,000	80,000
Office and Overhead	80,000	100,000	120,000	140,000
Real & Personal Property Taxes	140,000	140,000	140,000	140,000
Michigan Single Business Tax	58,750	117,500	176,250	235,000
Licenses & Fees	10,000	15,000	20,000	30,000
Legal and Accounting	50,000	50,000	75,000	100,000
Contingencies	100,000	150,000	200,000	300,000
Total Operating Costs	1,490,000	2,186,500	2,586,250	3,102,000
Forecasted Annual Net Cash Flow before Income Taxes for the Facility	2,910,000	6,613,500	10,813,750	14,898,000